

# A NEW SPECIES OF THE GENUS *CATALEPTONETA* FROM BELASITSA MTS, BULGARIA (ARANEAE, LEPTONETIDAE)

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**Abstract** A new species of the spider family Leptonetidae, *Cataleptoneta detriticola* sp. nov. collected in Belasitsa Mts, Bulgaria, is diagnosed, described, and illustrated.

**Key words** Taxonomy, new species, *Cataleptoneta*, description.

## 1 Introduction

The genus *Cataleptoneta* Denis, 1955 includes six species, *C. edentula* Denis, 1955, the type species from Lebanon, *C. aesculapii* (Brignoli, 1968) and *C. sbordonii* (Brignoli, 1968) from Turkey, *C. sengleti* (Brignoli, 1974) from Crete, *C. semipinnata* Wang & Li, 2010 from Greece, and *C. lingulata* Wang & Li, 2010 from Croatia. The genus *Cataleptoneta* is similar to *Barusia* and can only be distinguished by the presence of one more or less modified retrolateral spine on the male palpal tarsus (Kratochvíl, 1978). In this paper, a new species, *Cataleptoneta detriticola* sp. nov. from Belasitsa Mts of South Western Bulgaria, is reported.

## 2 Material and Methods

Specimens were collected using pitfall traps. Coloration is described from alcohol-preserved specimens. Specimens were examined and measured using a Wild M5A stereomicroscope. Further details were studied and measured under an Olympus BX41 compound microscope. All drawings were made using a drawing apparatus attached to Olympus SZX10 stereomicroscope. Male left palpi and female genitalia were examined and illustrated after they were dissected from the spiders' bodies. Photos were taken with an Olympus C7070 wide zoom digital camera mounted on an Olympus SZX12 stereomicroscope. The images were montaged using Helicon Focus image stacking software. Measurements of the legs are taken from the dorsal side. Total length of the body includes the chelicerae. All measurements were taken in mm. Abbreviations used in text including: AER-anterior eye row; ALE-anterior lateral eyes; PER-posterior eye row; PLE-posterior lateral eyes; PME-posterior median eye; ALE-PME-interval between ALE and PME; PLE-PLP-interval between PLEs; PLE-PME-interval between PLE and PME; CO-conductor; EM-

embolus; MA-median apophysis; SD-sperm duct; SP-spermatheca. Type specimens are deposited in the National Museum of Natural History (NMNH) in Sofia, Bulgaria and Institute of Zoology, Chinese Academy of Science (IZCAS) in Beijing, China.

## 3 Family Leptonetidae Simon, 1890

### *Cataleptoneta detriticola* sp. nov. (Figs 1–11)

Holotype male (NMNH), Bulgaria, Belasitsa Mts (Distr. Petrich) (41° 37' N, 23° 20' E; alt. 500 m), 7–8 May 2010, C. Deltchev leg. Paratypes: 1 male and 1 female (NMNH), 1 male and 1 female (IZCAS), same data as holotype.

**Etymology.** The specific name is derived from Latin “detritus” and “colo”, and refers to living in the detritus.

**Diagnosis.** This new species is similar to *C. semipinnata* Wang & Li, 2010, but can be distinguished by the palpal femur armed with ten spines that erected from small tubercles retrolaterally (Figs 5, 10), the palpal tibia with six strong spines, three long three short (Figs 5, 10), the tarsus with one saber-shaped spine and three strong spines retrolaterally, and the palpal bulb with one long and straight median apophysis in the male (Figs 3–5, 9–10); and the sperm duct with the same length as spermatheca in the female (Figs 8, 11).

**Description.** Male (holotype). Total length 1.80. Prosoma 0.58 long, 0.54 wide. Opisthosoma 1.01 long, 0.58 wide. Sternum 0.43 long, 0.36 wide. Prosoma yellowish. Six eyes. Eye measurements: ALE 0.04, PLE 0.06, PME 0.04; ALE-PME 0.06, PLE-PLP 0.06, PLE-PME 0.04; AER 0.08, PER 0.20. Median groove distinct, cervical grooves and radial furrow distinct, yellowish. Clypeus 0.06 high. Chelicerae stubby, yellow, fang furrow with eight promarginal teeth and four small

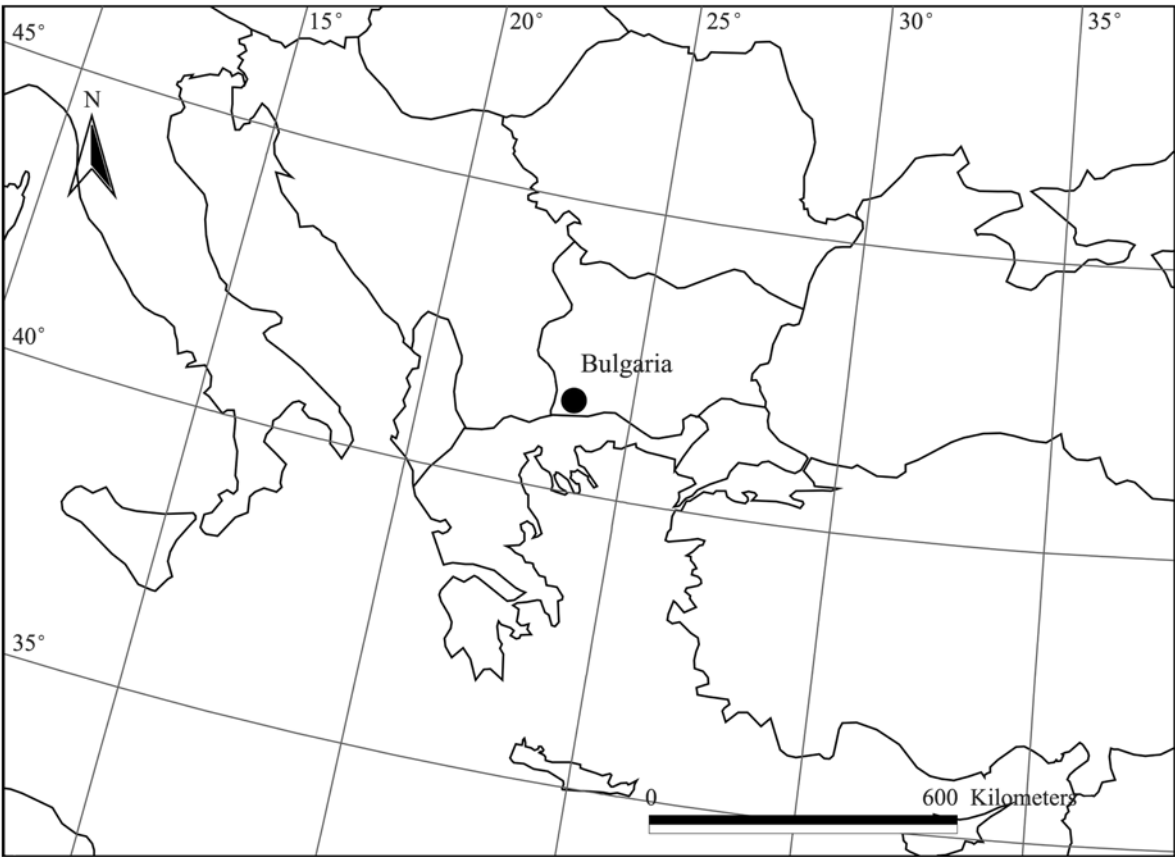


Fig. 1. Locality record for *Cataleptoneta detriticola* sp. nov. in Bulgaria.

retromarginal teeth. Endites and labium yellow. Sternum and legs yellowish. Leg measurements ( I / IV / II / III ) as followed.

Male	I	II	III	IV
Femur	1. 33	1. 08	0. 97	1. 26
Patella	0. 18	0. 18	0. 18	0. 18
Tibia		1. 08	0. 76	1. 15
Metatarsus		0. 79	0. 65	0. 94
Tarsus		0. 54	0. 65	0. 58
Total		3. 64	3. 24	4. 11

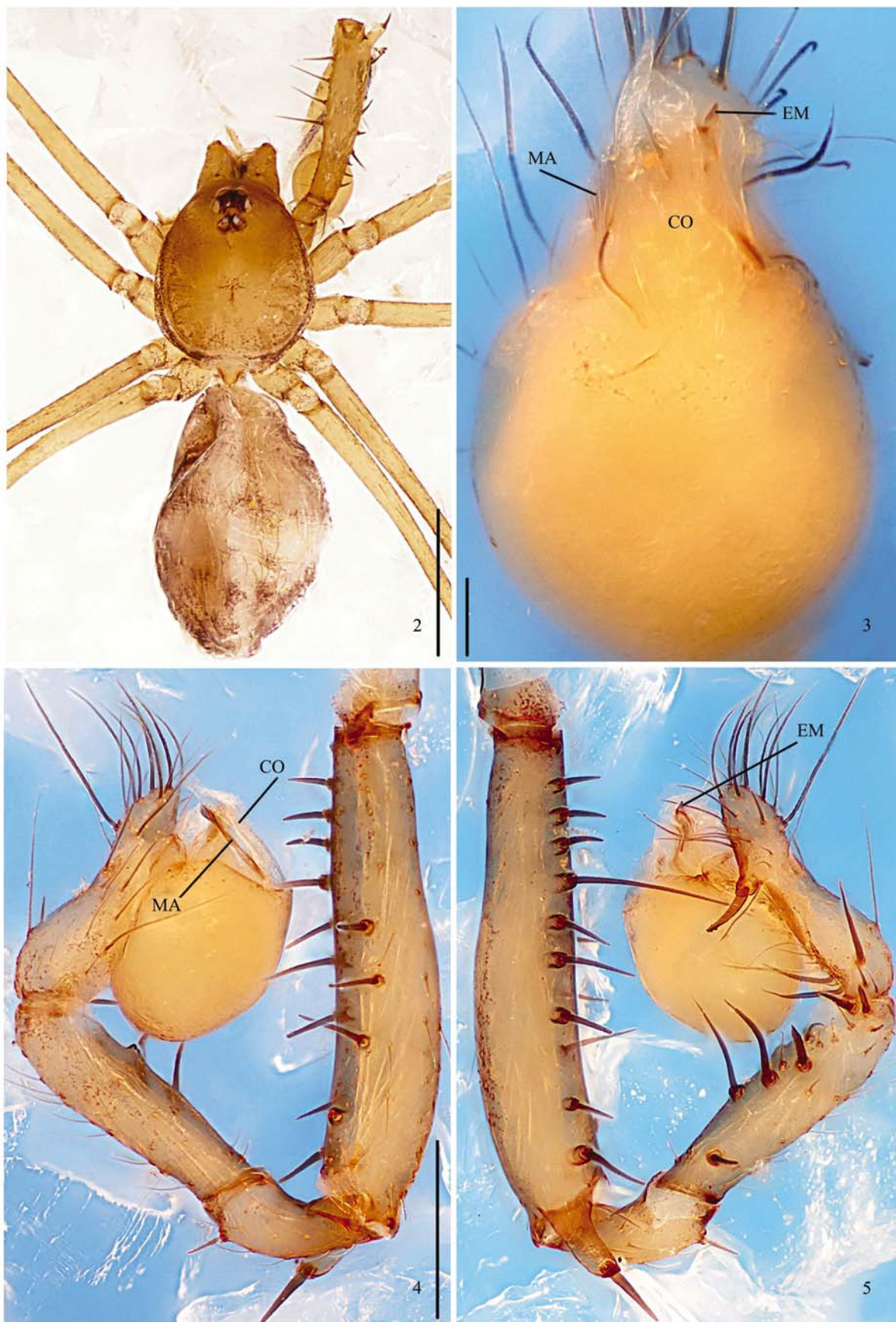
Male palp ( Figs 3 – 5, 9 – 10 ). Femur armed with four strong spines prolaterally and ten spines retrolaterally, which arise from small tubercles; patella with one short spine dorsally and distally; tibia with three strong, long spines arising from small tubercles, and three strong and short spines retrolaterally; tarsus with one saber-shaped spine and three strong spines retrolaterally. Tip of the bulb: median apophysis chitinous, long and straight; conductor translucent; embolus pointed, weakly sclerotized.

Female. Similar to male in coloration and general features ( Figs 6 – 7 ). Total length 1. 70. Prosoma 0. 70 long, 0. 60 wide. Opisthosoma 0. 90 long, 0. 70 wide. Sternum 0. 50 long, 0. 40 wide. Clypeus 0. 08 high. Six eyes. Eye measurements: ALE 0. 05, PLE 0. 06, PME 0. 04; ALE-PME 0. 05, PLE-PLE 0. 04, PLE-PME 0. 03; AER 0. 10, PER 0. 16. Leg measurements ( I / IV / II / III ) as followed.

Female	I	II	III	IV
Femur	1. 50	1. 20	1. 12	1. 37
Patella		0. 19	0. 19	0. 19
Tibia		1. 10	0. 80	1. 15
Metatarsus		0. 80	0. 70	0. 95
Tarsus		0. 60	0. 55	0. 62
Total		3. 89	3. 36	4. 28

Genital area covered with long hairs. Internal genitalia ( Figs 8, 11 ) with a pair of sperm ducts and a pair of distinctly coiled and weakly sclerotized spermathecae.

Distribution. Bulgaria ( Belasitsa Mts ) ( Fig. 1 ).

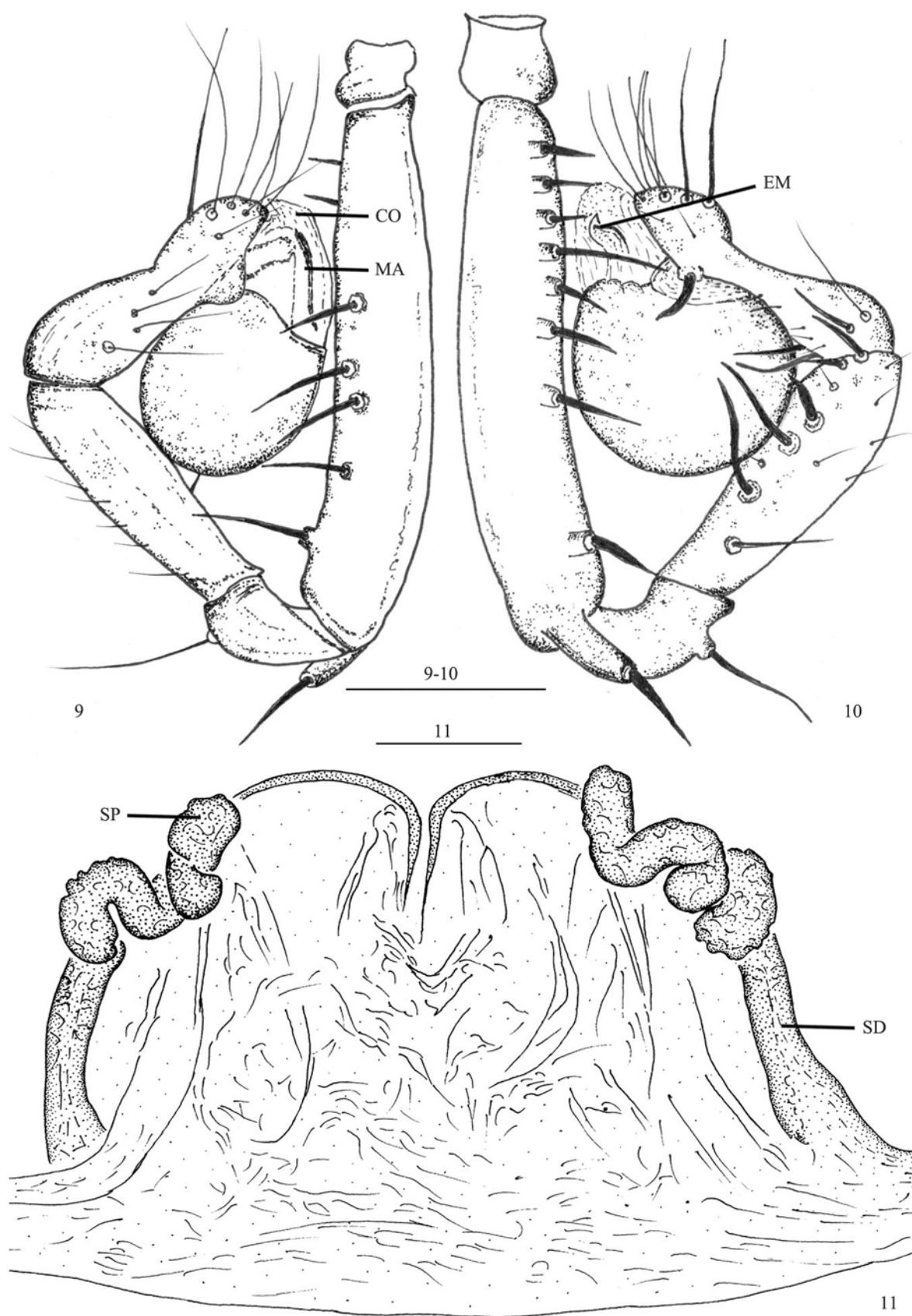


Figs 2–5. *Cataleptoneta detriticola* sp. nov., male holotype. 2. Habitus, dorsal view. 3. Palpal bulb, ventral view. 4. Palp, prolateral view. 5. Palp, retrolateral view. Scale bars: 2, 4–5 = 0.5 mm, 3 = 0.1 mm.





Figs 6 – 8. *Cataleptoneta detriticola* sp. nov., female paratype. 6. Habitus, dorsal view. 7. Habitus, ventral view. 8. Spermatheca, dorsal view. Scale bars: 6 – 7 = 0.5 mm, 8 = 0.05 mm.



Figs 9 - 11. *Cataleptoneta detriticola* sp. nov., male holotype. 9. Palp, prolateral view. 10. Palp, retrolateral view. 11. Spermatheca, dorsal view. Scale bars: 9 - 10 = 0.5 mm, 11 = 0.05 mm.

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## REFERENCES

- Brignoli, P. M. 1968. Due nuove *Paraleptoneta* cavernicole dell'Asia Minore (Araneae, Leptonetidae). *Fragmenta Entomologica*, 6: 23–37.
- Brignoli, P. M. 1974. Araignées de Grèce VIII. Quelques Leptonetidae de la Laconie et de l'île de Crète (Arachnida, Araneae). *Annales de Spéléologie*, 29: 63–70.
- Denis, J. 1955. Biospeologica 75. Mission Henri Coiffait au Liban (1951), 7. Araignées. *Archives de Zoologie Experimentale et Générale*, 91: 437–454.
- Kratochvíl, J. 1978. Araignées cavernicoles des les Dalmates. *Přírodovědné Práce Ústavů Československé Akademie Věd v Brně*, (N. S.), 12 (4): 1–59.
- Wang, C-X and Li, S-Q 2010. Two new species of the spider genus *Cataleptoneta* from Balkan Peninsula (Araneae, Leptonetidae). *Zootaxa*, 2730: 57–68.

## 保加利亚次弱蛛属一新种描述 (蜘蛛目, 弱蛛科)

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**摘要** 描述了保加利亚弱蛛科次弱蛛属 1 新种, 碎屑次弱蛛 *Cataleptoneta detriticola* sp. nov.。模式标本分别保存在保加利

亚科学院国家自然历史博物馆和中国科学院动物研究所。

**关键词** 分类, 次弱蛛属, 新种.

**中图分类号** Q959.226